

What is claimed is:

1. A method for creation of an oxide ring surrounding a guard ring of a semiconductor die, comprising:

providing a substrate comprising semiconductor devices being accessible by points of electrical contact provided in or over the substrate, said semiconductor devices comprising a semiconductor die by being surrounded by a guard ring;

creating at least one level of interconnect metal with corresponding interconnect vias over the substrate aligned with said points of electrical contact; and

surrounding the guard ring with an oxide ring comprising a trench filled with an oxide.

2. The method of claim 1, the surrounding the guard ring with an oxide ring comprising a trench filled with an oxide comprising:

performing at least one trench etch, creating at least one trench surrounding the guard ring;

performing at least one oxide deposition, filling the at least one trench; and

performing at least one process of Chemical Mechanical Polishing (CMP) for removal of excess oxide.

3. The method of claim 1, the oxide comprising Undoped Silicon Glass (USG).

4. A method for dicing a semiconductor substrate, thereby creating singulated semiconductor die, comprising:

providing a substrate comprising semiconductor devices being accessible by points of electrical contact provided in or over the substrate, said semiconductor devices comprising a semiconductor die by being surrounded by a guard ring, said substrate comprising sawing paths, a lateral surface area being available over the semiconductor die separating the guard ring from the sawing paths;

creating at least one level of interconnect metal with corresponding interconnect vias over the substrate aligned with said points of electrical contact;

creating an oxide ring comprising a trench filled with an oxide over the lateral surface area of the semiconductor die; and

singulating the substrate into semiconductor die by sawing along the sawing paths.

5. The method of claim 4, the creating a trench filled with an oxide over the lateral surface area of the semiconductor die comprising:

performing at least one trench etch, creating at least one trench surrounding the guard ring;

performing at least one oxide deposition, filling the at least one trench; and

performing at least one process of Chemical Mechanical Polishing (CMP) for removal of excess oxide.

6. The method of claim 4, the oxide comprising Undoped Silicon Glass (USG).

7. The method of claim 4, the singulating the substrate into semiconductor die further comprising sawing through a part of the oxide ring.

8. An oxide ring surrounding a guard ring of a semiconductor die, comprising:

a substrate comprising semiconductor devices being accessible by points of electrical contact provided in or over the substrate, said semiconductor devices comprising a semiconductor die by being surrounded by a guard ring;

at least one level of interconnect metal with corresponding interconnect vias created over the substrate aligned with said points of electrical contact; and

an oxide ring comprising a trench filled with an oxide surrounding the guard ring.

CS03-026

9. An oxide ring of claim 8, the oxide comprising undoped Silicon Glass (USG).